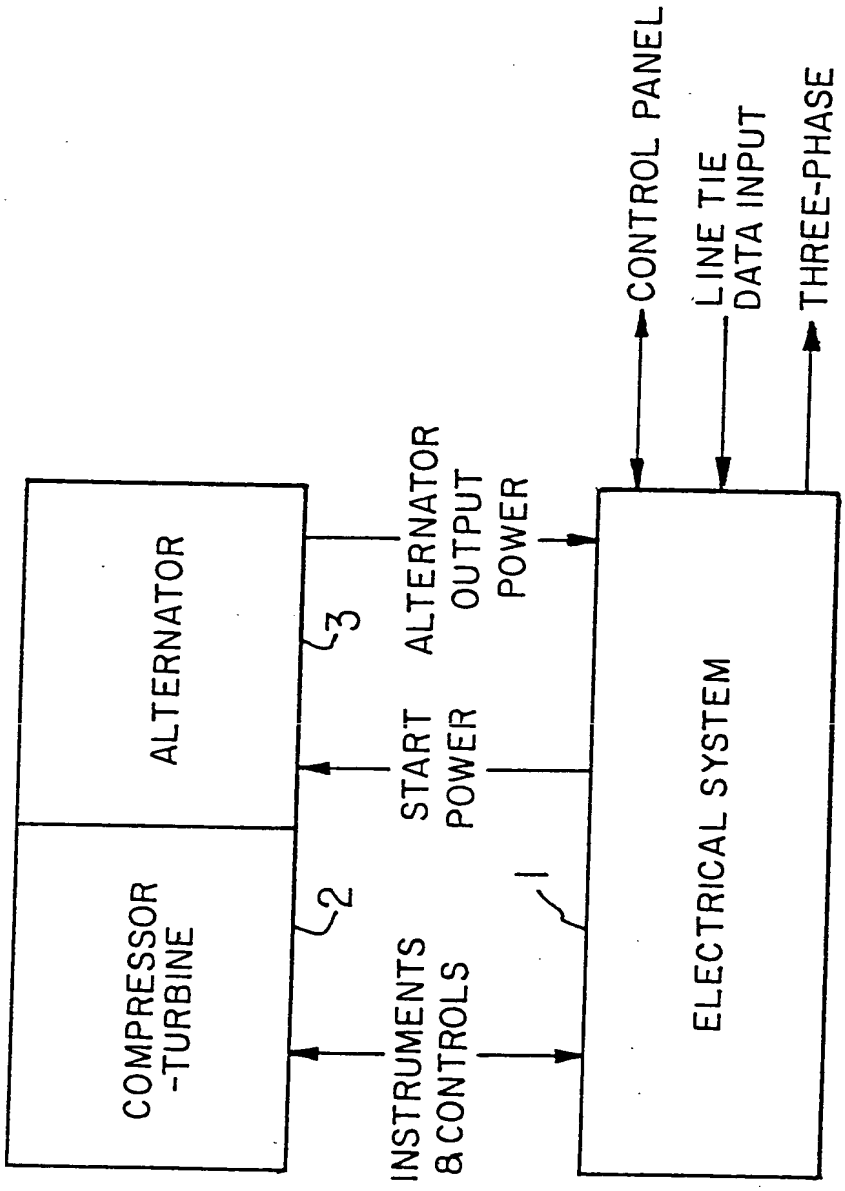
CONTROL PANEL
LINE TIE DATA INPUT
THREE-PHASE USER POWER OUTPUT
ALTERNATOR
COMPRESSOR -TURBINE
3
2
1
ALTERNATOR OUTPUT POWER
START POWER
INSTRUMENTS & CONTROLS
ELECTRICAL SYSTEM

FIG. 1

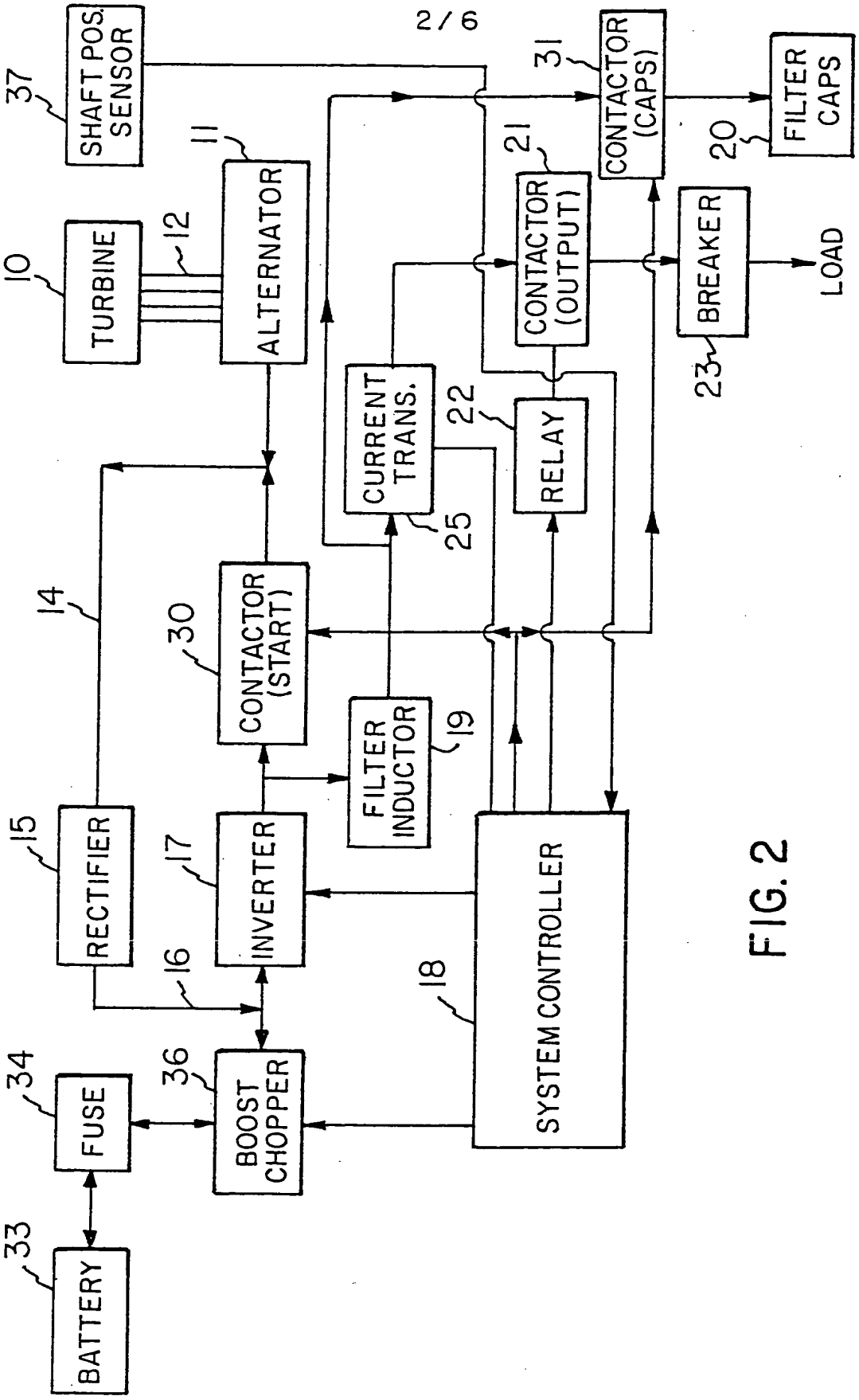
SHAFT POS. SENSOR
37
TURBINE
10
12
ALTERNATOR
11
CONTACTOR (CAPS)
31
FILTER CAPS
20
21
CONTACTOR (OUTPUT)
BREAKER
LOAD
23
CURRENT TRANS.
25
22
RELAY
14
30
CONTACTOR (START)
FILTER INDUCTOR
19
15
RECTIFIER
17
INVERTER
16
18
SYSTEM CONTROLLER
34
FUSE
36
BOOST CHOPPER
33
BATTERY

FIG. 2

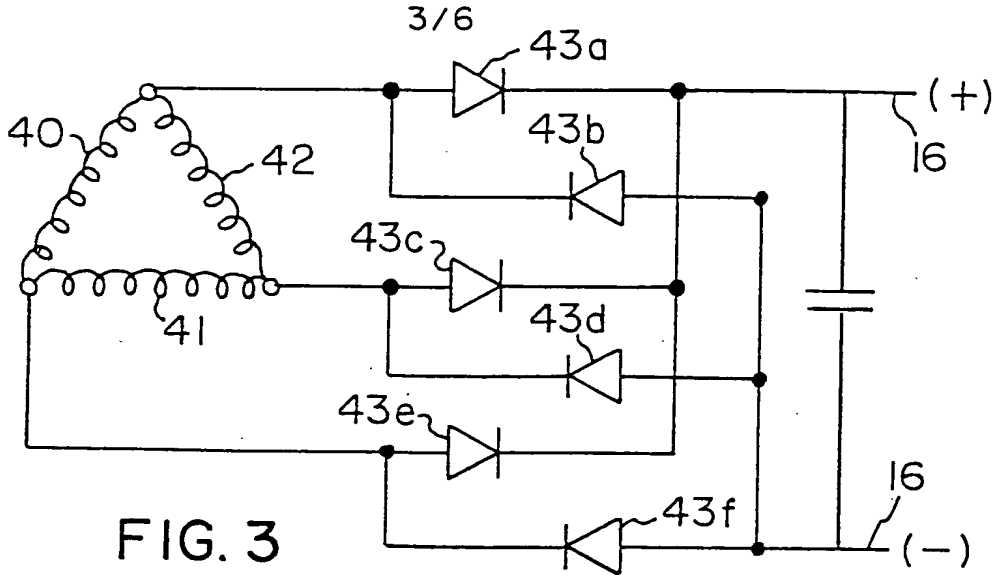

FIG. 3

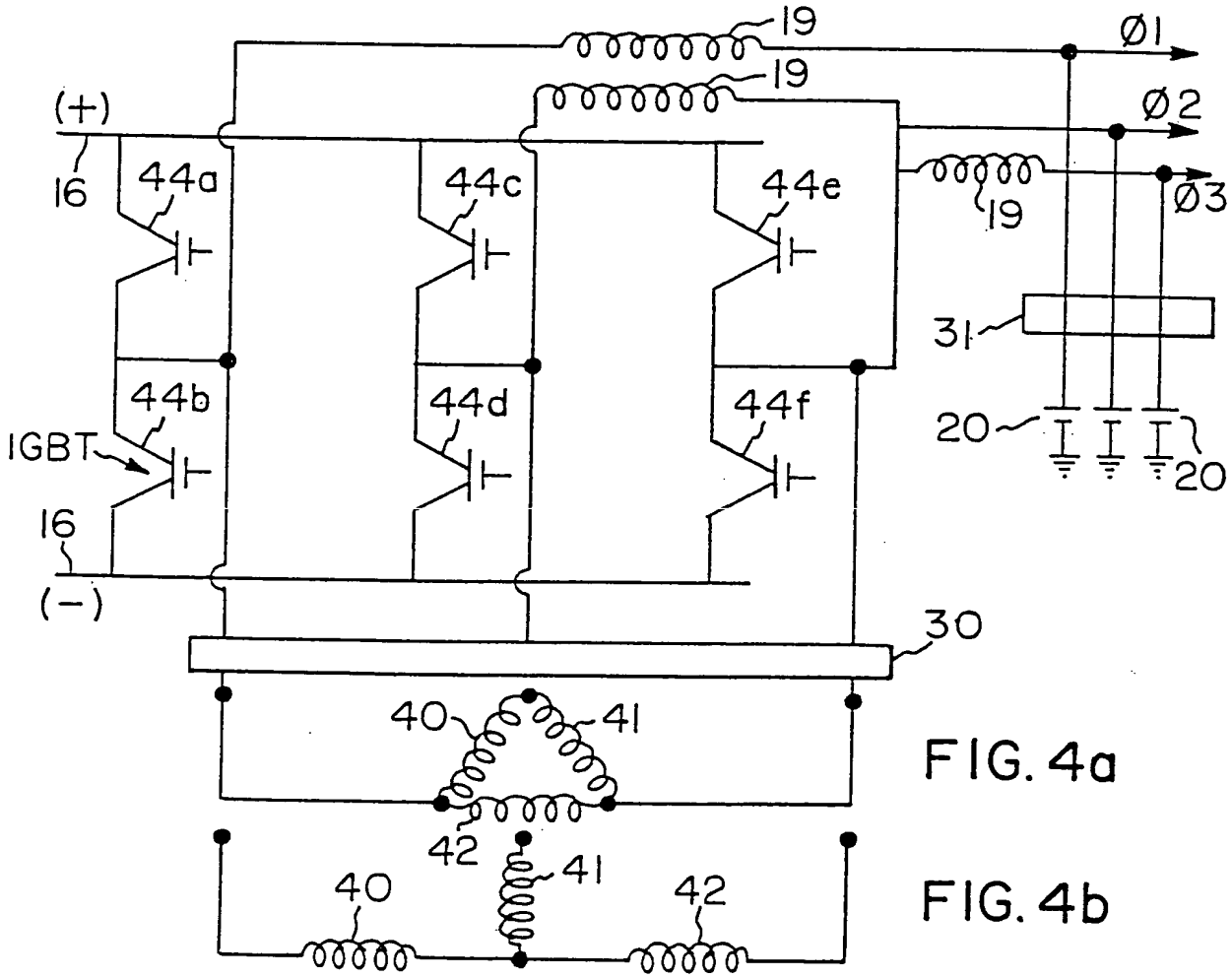

FIG. 4a

FIG. 4b

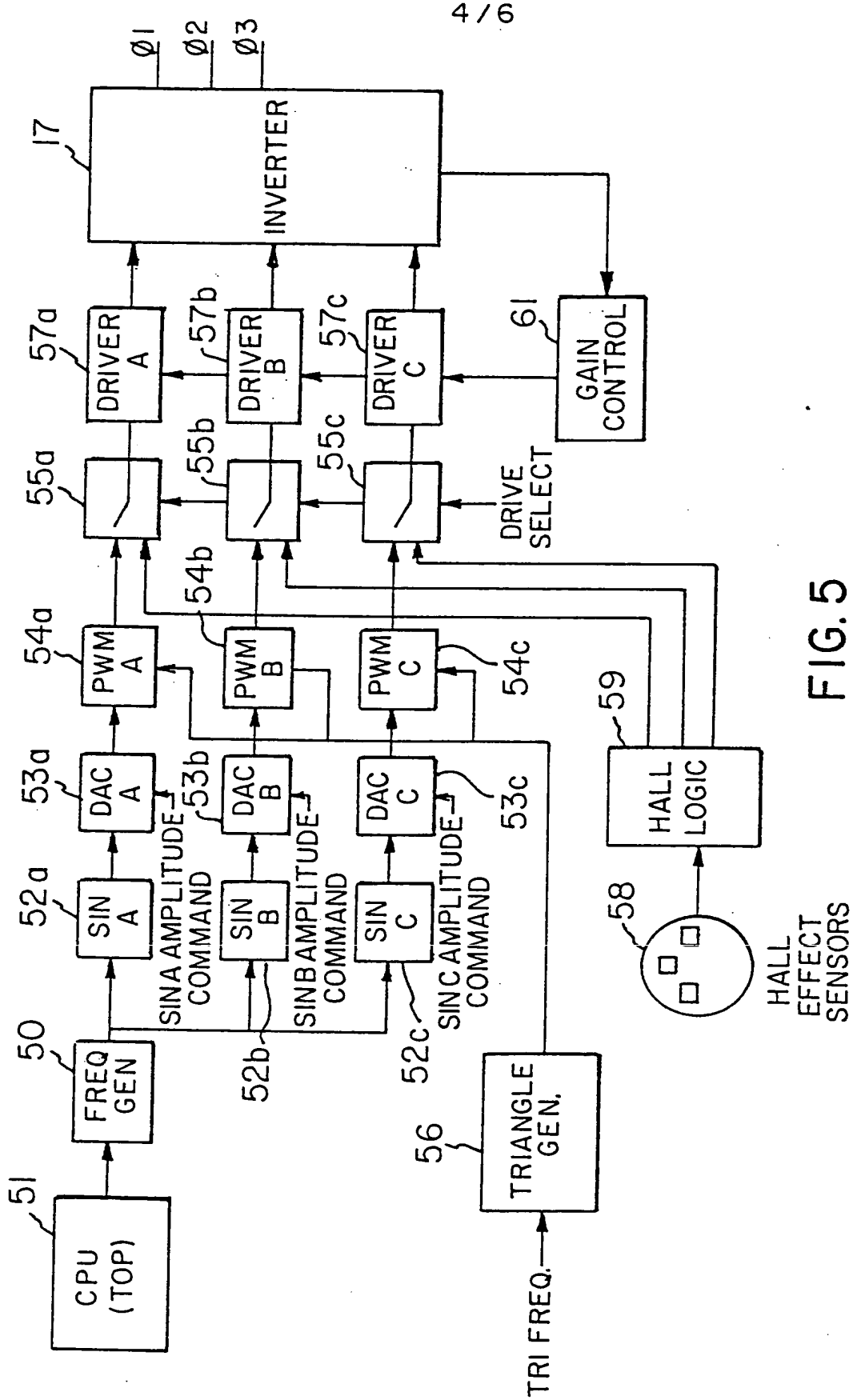
Ø1
Ø2
Ø3
17
INVERTER
57a
DRIVER A
57b
DRIVER B
57c
DRIVER C
61
GAIN CONTROL
55a
55b
55c
DRIVE SELECT
54b
54a
PWM A
PWM B
PWM C
54c
59
53a
DAC A
53b
DAC B
DAC C
53c
HALL LOGIC
52a
SIN A
SIN B
SIN C
SINA AMPLITUDE COMMAND
SINB AMPLITUDE COMMAND
SINC AMPLITUDE COMMAND
58
HALL EFFECT SENSORS
50
FREQ GEN
52b
52c
56
TRIANGLE GEN.
51
CPU (TOP)
TRI FREQ.

FIG. 5

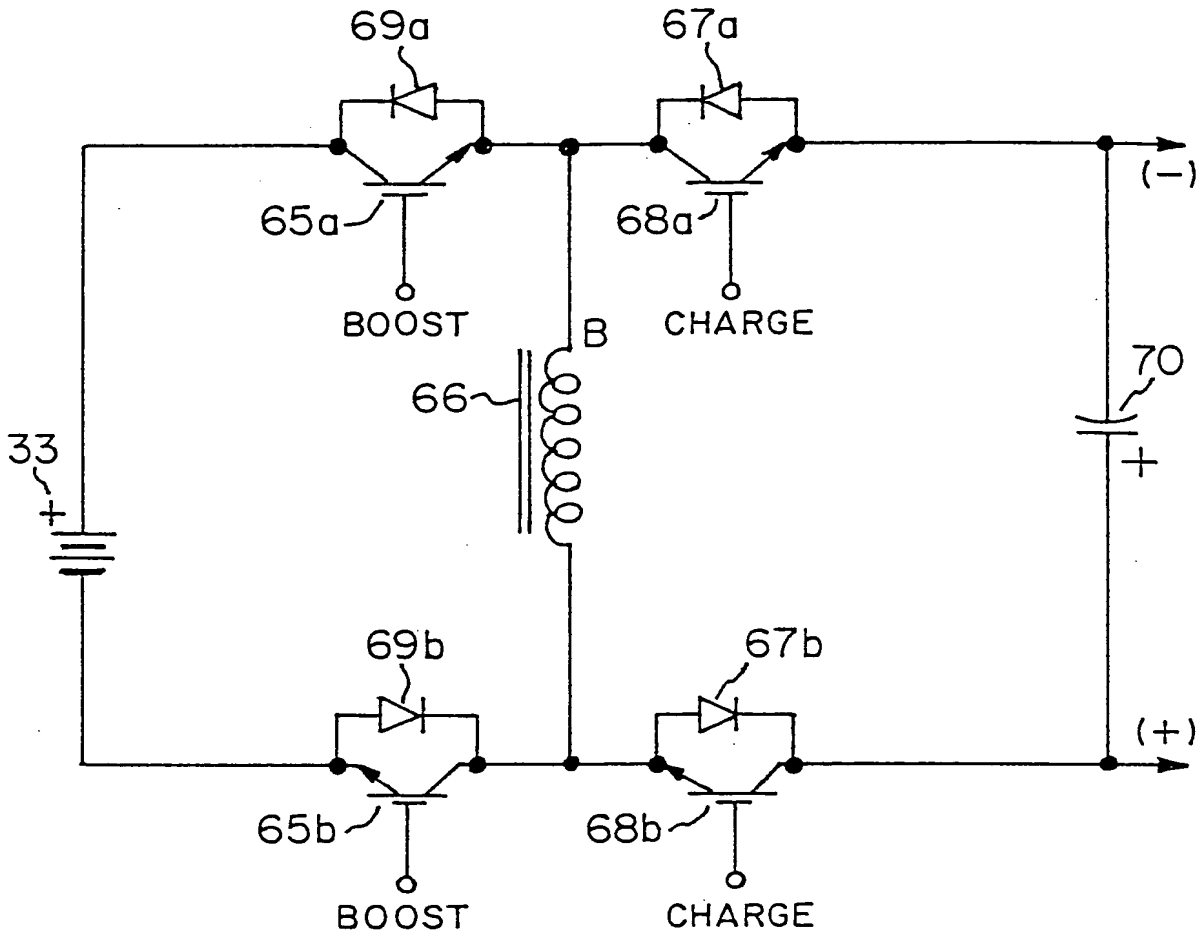
69a
67a
65a
68a
BOOST
B
CHARGE
(−)
66
70
33
+
+
69b
67b
(+)
65b
68b
BOOST
CHARGE

FIG. 6

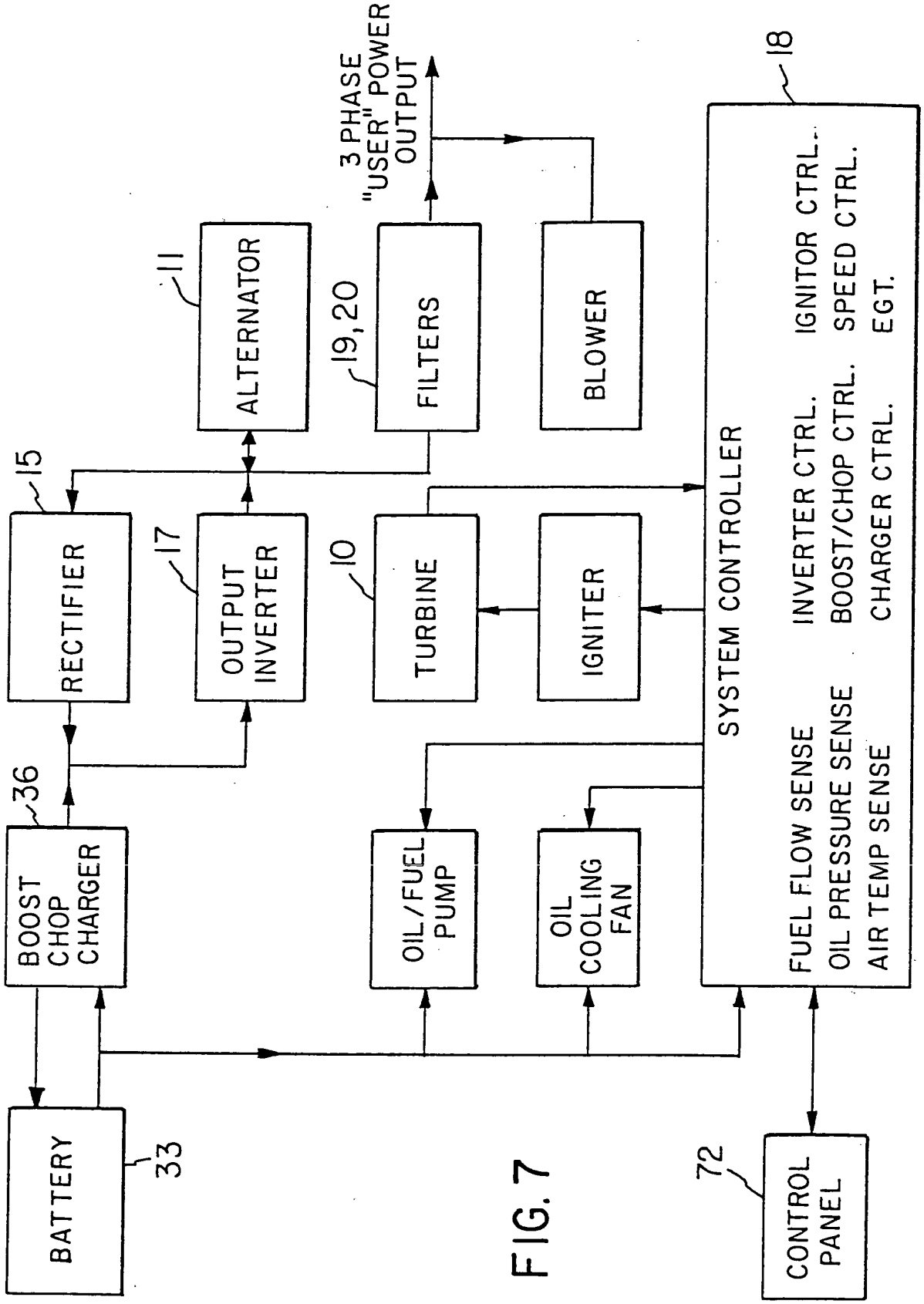
3 PHASE "USER" POWER OUTPUT
18
11
ALTERNATOR
19,20
FILTERS
BLOWER
15
RECTIFIER
17
OUTPUT INVERTER
10
TURBINE
IGNITER
SYSTEM CONTROLLER
INVERTER CTRL.
IGNITOR CTRL.
BOOST/CHOP CTRL.
SPEED CTRL.
CHARGER CTRL.
EGT.
FUEL FLOW SENSE
OIL PRESSURE SENSE
AIR TEMP SENSE
36
BOOST CHOP CHARGER
OIL/FUEL PUMP
OIL COOLING FAN
BATTERY
33
72
CONTROL PANEL

FIG. 7